

## **REMARKS/ARGUMENTS**

### **I. Status of the Claims**

Claims 1-7 and 23-50 are currently pending, with claims 1-7, 27-37 and 43-50 withdrawn from consideration as directed to a non-elected invention. Amendments to the claims are made without prejudice or disclaimer. Applicants reserve the right to reintroduce the unamended or canceled claims in this or another application. Withdrawn claims are canceled solely because they are considered to be directed to non-elected subject matter. Claims 23-25, 38-40 and 42 are thus pending following entry of this amendment.

The amended and new claims are supported throughout the specification, including, for example, at page 24, line 29 through page 27; page 53 line 25 to page 54, line 20; page 55, line 24 to page 57, line 11; and page 61, line 1 to page 63, line 3.

### **II. Interview**

Applicants thank Examiner Belyavskiy and his supervisor Christina Chan for their courtesy in discussing this application with Applicants' representatives on December 2, 2003. An Interview Summary is attached, which summarizes the issues discussed during the interview.

### **III. Amendments to the Specification**

The cross reference to related application section has simply been amended to clarify the nature of the relationships between the applications.

### **IV. Claim Rejections under 35 U.S.C. §112, Second Paragraph**

Claim 23 has been amended to consistently use the phrase PDZ-domain polypeptide. This phrase is defined, for example, at page 12, lines 25-27.

V. Claim Rejections under 35 U.S.C. §103

Claims 23-26 and 38-42 are rejected under 35 U.S.C. §103 as obvious over Gee et al. (J. Neuroscience 18:128-137, 1988; "Gee") in view of Coligan et al. (Current Protocols in Immunology pages 2.03-2.1.9, 1991; "Coligan") and statements within the specification.

In response it is noted that base claim 23 has been amended to clarify that the current claims are directed to methods for determining an interaction profile for a PDZ Ligand protein (PL protein). The presently claimed methods involve:

- (a) contacting a PL protein to an array of at least 5 PDZ-containing polypeptides of different amino acid sequence, each located at a different predetermined site on the array;
- (b) detecting whether the PL protein interacts with the PDZ- containing polypeptide at each site of the array; and
- (c) determining an interaction profile for the PL protein from the interactions detected in step (b).

To establish a prima facie case of obviousness of a claimed invention, each and every claim element must be taught or suggested by the prior art (see, e.g., *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); and MPEP 2143.03). Neither Gee nor Coligan teach or suggest a method that utilizes an array with the characteristics of the array described in claim 23 as currently pending. Nor do they teach or suggest methods in which a PL protein is screened against such an array and interactions at each site of the array detected to determine an interaction profile for the PL protein.

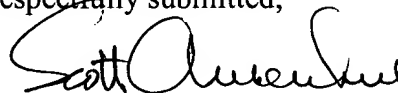
Because the cited references fail to teach or suggest each element of the claim as required to establish a prima facie case of obviousness, it is submitted that claim 23 and its dependents are non-obvious over the cited references. It is thus requested that this ground for rejection be withdrawn.

Appl. No. 09/688,017  
Amdt. dated January 28, 2004  
Amendment under 37 CFR 1.116 Expedited Procedure  
Examining Group

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



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PATENT  
Docket No.: 020054-001110US

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Tara N. Damhoff

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

LU et al.

Application No.: 09/688,017

Filed: October 13, 2000

For: MOLECULAR INTERACTIONS  
IN HEMATOPOIETIC CELLS

Customer No.: 20350

Confirmation No.: 7473

Examiner: Belyavskyi, Michael A.

Art Unit: 1644

INTERVIEW SUMMARY UNDER 37  
C.F.R. 1.133

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Sir:

Applicants thank Examiner Belyavskyi and his supervisor, Christina Chan, for conducting an interview concerning this application with Applicant's representatives, Bill Smith and Dr. Dave Garman on December 2, 2003. This paper summarizes the content of this interview (see 37 C.F.R. 1.133 and MPEP 713.04).

1. Brief Description of any Exhibits: A slide show that summarized background and principles of the claimed methods.

2. Identification of Claims Discussed: Claims 23 and 31.
3. Identification of Prior Art Discussed: Gee et al. (J. Neuroscience 18:128-137, 1988)
4. Proposed Amendments and Summary of Main Arguments: The Examiner suggested amending claim 23 to focus on methods of determining an interaction profile for a PL protein by screening the PL protein against an array of PDZ-domain polypeptides.
5. Other Pertinent Matters: None
6. General Results or Outcome: Applicants' representatives indicated they would consider amending the claims as suggested by the Examiner.

Respectfully submitted,



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